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ABSTRACT

College students in nine intact beginning speech classes served as subjects for a study testing the effects of humor on student recall of lecture information. The 156 subjects were exposed to one of three versions of an audiotaped lecture. One version amplified eight points in the subject matter with humorous material; and a third version (the control) contained no amplification of the eight points. Immediately after exposure, subjects evaluated the lecture on semantic differential scales and took a multiple choice exam over the contents of the lecture. Two weeks later the subjects were reexamined over the lecture as part of their midterm examination. One-way analysis of variance revealed that even though the humorous version of the lecture was perceived as more humorous than the nonhumorous versions, no difference in recall among the three conditions was found for either immediate or delayed recall. (RL)

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RETENTION OF LECTURE ITEMS REINFORCED WITH HUMOROUS AND NON-HUMOROUS EXEMPLARY MATERIAL

by

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of

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An Abstract Of

RETENTION OF LECTURE ITEMS REINFORCED WITH HUMOROUS AND NON-HUMOROUS EXEMPLARY MATERIAL

Ss were exposed to an audio-taped lecture on "Listening." One version amplified eight points of subject matter with humorous material; another version amplified the same points with comparable, non-humorous material. A third version, the "control," contained no amplification of those eight points. Immediately after exposure subjects evaluated the lecture on semantic differential-type scales and took a multiple-choice exam over the lecture's contents. Two weeks later the Ss were re-examined over the lecture as part of their midterm exam.

One-way analyses of variance revealed that even though the humorous version of the lecture was perceived as more humorous than the non-humorous versions, no difference in recall among the three conditions, for either immediate or delayed recall, was found. The results of the study tend to confirm those of most previous studies.

RETENTION OF LECTURE ITEMS REINFORCED WITH HUMOROUS AND NON-HUMOROUS EXEMPLARY MATERIAL

Charles R. Gruner and Dwight L. Freshley

Textbooks on speaking often list "humor" as one of several devices the speaker can use to create "interest." This theory of humor as a factor of interest has led researchers to add humor to discourse and test whether interest so "heightened" by humor results in greater audience recall. The bulk of the evidence from these studies[1] shows no effect of humor upon recall, with one exception. Gibb[2] found that facts from a lecture on biology were recalled more frequently when humor was added. However, these unique results may have been due to methodological faults in the study's design. Gibb used the unusual procedure of starting out with a standardized biology exam and building his experimental lecture on it, instead of vice versa. Also, his use of large intact lecture sections probably introduced a time-of-day confounding variable.[3]

A different approach in which positive findings were discovered was by Kaplan and Pascoe.[4] Instead of simply inserting humor into their experimental lecture on the theory that general interest level would thereby be raised, they used humorous illustrations to directly exemplify concepts in their lecture on Freudian personality theory. Subjects were tested for recall immediately after the videotaped 20-minute lectures and again six weeks later. There was no difference in <u>immediate</u> recall between those hearing the humorous and non-humorous versions of the lecture; however, six weeks later those subjects who heard the humorous versions scored significantly higher on recall of those concepts that were illustrated with humor. Kaplan and Pascoe theorize that the students remembered the humorous examples longer, and thus could better understand and recall the concepts they illustrated. They further suggest that previous research found no recall effect of humor because of (1) the lack of delayed post-tests and (2) the lack of relation of the humorous material used to the material in the test items.

So the results of Kaplan and Pascoe suggest that the speaker will make concepts

more memorable by illustrating them with humor. But what about illustrating concepts with non-humorous examples? Both Jersild[5] and Ehrensberger,[6] after all, found a number of non-humorous factors enhanced learning from informative discourse. It was not clear from the report of Kaplan and Pascoe's design whether they controlled for illustration, period. (Subsequent correspondence with Kaplan has confirmed that they did control for non-humorous counterpart examples.)

The present study, to test for humorous and non-humorous amplification, was conducted as a quasi-experiment at the University of Georgia in Spring, 1980.

Method

Subjects and Setting. Nine intact beginning speech classes served as subjects for the study, three each assigned to one of three conditions humorous amplification, non-humorous amplification, and control. The study was introduced to them by Mr. Freshley, and the appropriate stimulus was played to them on an audio cassette recorder. In the initial phase of the study, 167 Ss took part; for the delayed post-test the n had shrunk to 156 through classroom mortality.

Stimuli. The basic lecture, which without the humor served as the control stimulus, was the one on "Listening" originally developed for his dissertation study by Kibler[7] and used in previous humor research by Gruner and others.[8]

A humorous version was developed by adding a humorous introduction and other humor previously tested informally; some of this latter humor went directly to amplify some of the lecture material, while other humor did not. Eight particular points in the lecture were directly amplified by humor; these points were represented in the recall test by eight corresponding multiple-choice test items.

The non-humorous amplification version was achieved by deleting all humor and replacing the humorous amplification with non-humorous amplification of a similar nature. For instance, the fact that audience members usually remember, on the average, only about 25% of what they hear in a lecture was amplified humorously in this way:

> Some would say that 25% isn't very much. But then it all depends on your point of view. If you were the President, and only 25% of the people supported you, that is a low figure. On the other hand, it's a pretty high figure if 25% of the people are out to assassinate you.

The non-humorous amplification substituted for the above was:

> Some would say that 25% isn't very much. And I guess it isn't. That's only 1 out of 4, and you would not make very good grades getting '25's on all your exams.

To keep delivery constant over the three versions, the entire lecture with both the humorous and non-humorous amplification was tape recorded by Mr. Gruner; control and non-humorous amplification-only versions of the speech were then accomplished by electronic editing.[9]

Procedures. In all but two of the nine classes Mr. Freshley introduced the study; the initial phase of the study was to be two weeks before the classes' midterm exams, and the experimenters were out of town when the first two classes would have to begin the experiment. The instructors in these two cases were trained to introduce the study and gather the data.

The "cover story" for the study was presented extemporaneously. Ss were told that they were to hear a lecture which the department was considering making a standard feature of our multi-section course in the future, but that it needed to be tried out and evaluated in a classroom setting. They were told they would hear the lecture, take a quiz over it and respond to some evaluative scales, and then would be re-tested over the material in two weeks as part of their regular midterm exam. They were also told that their regular instructor could use the scores to help determine their course grades.

After this indoctrination, the appropriate stimulus was played. The subjects then took the 16-item multiple-choice quiz; the even-numbered test items were those testing for amplified lecture points and the odd-numbered items were lecture points not so amplified. The Ss also responded anonymously to seven-step semantic differential-type scales bounded by "extremely interesting/extremely dull," "extremely funny/extremely unfunny," and "extremely useful/extremely unuseful" information. To help legitimize our "cover story" they also responded to a seven-step scale bounded by "extremely scholarly/extremely unscholarly" and to a question as to whether or not the listening lecture should be made a standard part of future classes.

Two weeks after initial exposure the Ss again took the 16-item quiz over the lecture as part of their midterm exams; they were told by their instructors at the time that correct answers on that quiz would be used as "bonus points." After all the data for the study were in hand the Ss were routinely debriefed.

Results. Table 1 shows the means for the semantic-differential-type ratings of the lecture. The higher the mean rating means the greater amount of the quality named in the table was attributed. These four trios of means were each subjected to one-way analyses of variance. All were non-significant except for the "funniness" ratings ($F = 6.695$, $p < .01$). Note that the rating for the humorous amplification version is highest; this finding validates the stimulus manipulation.[10]

These data also confirm a conclusion reached from previous studies. The addition of humor to an already-interesting speech can be detected as humor, but without adding to the overall interestingness rating of the message.

Table 2 shows the mean number of correct answers to the eight amplified test items on immediate and delayed post-tests. One-way analyses of variance on the means revealed F's not reaching unity. Recall of the test items was not affected by either method of amplification.

On the assumption that amplification may have affected recall of some but not other items, a further analysis of the recall test data was made. The number of correct and incorrect responses for each of the eight amplified items was tabulated for both the immediate and delayed tests. Data for the items which showed the greatest inclination toward significant difference were subjected to a 3 X 2 chi-square test. None of these proved to be statistically significant.

The finding here that humor added to a lecture did not affect recall of information from that lecture corresponds to the findings of most previous research but not to the findings of Kaplan and Pascoe. The difference in this and their findings probably rests on the difference in material tested for. In the present study the test items amplified were of a factual nature and required only "factual recall;" Kaplan and Pascoe humorously exemplified concepts and tested for recall plus understanding

Table 1

Mean Ratings From Four Semantic Differential Items

Stimulus	"Interesting"	"Funny"	"Useful Information"	"Scholarly
Control	4.796	3.685	4.944	5.093
Non-Humorous Amplification	4.586	3.362	5.052	5.052
Humorous Amplification	4.636	4.218	4.782	5.109

Table 2

Mean Recall Scores on Eight Amplified Test Items on Immediate and Delayed Tests

Stimulus	Immediate	Delayed
Control	6.259	5.872
Non-Hum. Amp.	6.224	5.769
Humor. Amp.	6.164	5.511

of concepts, not just facts. It may well be that humorously exemplifying this higher level of the learning taxonomy is more successful than merely amplifying those specific items, often of a numerical nature, which successful students have long been accustomed to picking out from a lecture as potential test items.

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[1]Most of these studies are summarized in Charles R. Gruner, Understanding Laughter: The Workings of Wit and Humor (Chicago: The Nelson-Hall Co., 1978).

[2]J. D. Gibb, "An Experimental Comparison of the Humorous Lecture and the Non-humorous Lecture in Informative Speaking," M.A. Thesis, University of Utah, 1964.

[3]A more complete critique is found in Gruner, Understanding Laughter, pp. 217-9.

[4]Robert M. Kaplan and Gregory C. Pascoe, "Humorous Lectures and Humorous Examples: Some Effects Upon Comprehension and Retention," Journal of Educational Psychology, 69 (Feb., 1977), 61-65.

[5]A. T. Jersild, "Modes of Emphasis in Public Speaking," Journal of Applied Psychology, 12 (1928), 611-20.

[6]R. Ehrensberger, "The Relative Effectiveness of Certain Forms of Emphasis in Public Speaking," Speech Monographs, 12 (1945), 94-111.

[7]Robert J. Kibler, "The Impact of Message Style and Channel in Communication," Ph. D. Dissertation, The Ohio State University, 1962.

[8]See Gruner, Understanding Laughter, Chap. 7.

[9]Copies of the lectures used can be obtained by writing the authors.

[10]This validation occurred despite the unusual reaction of one of the classes exposed to the humor-amplified stimulus. Members of this class (in interpersonal communication, not public speaking) reacted negatively to the humor, perhaps because of tension due to getting other test results back that day. Several students gave the lecture a score of "1," meaning "extremely unfunny."